Fall 2008

Media-Flex

Gerard DeRomanis Jr.

MEDIA-FLEX

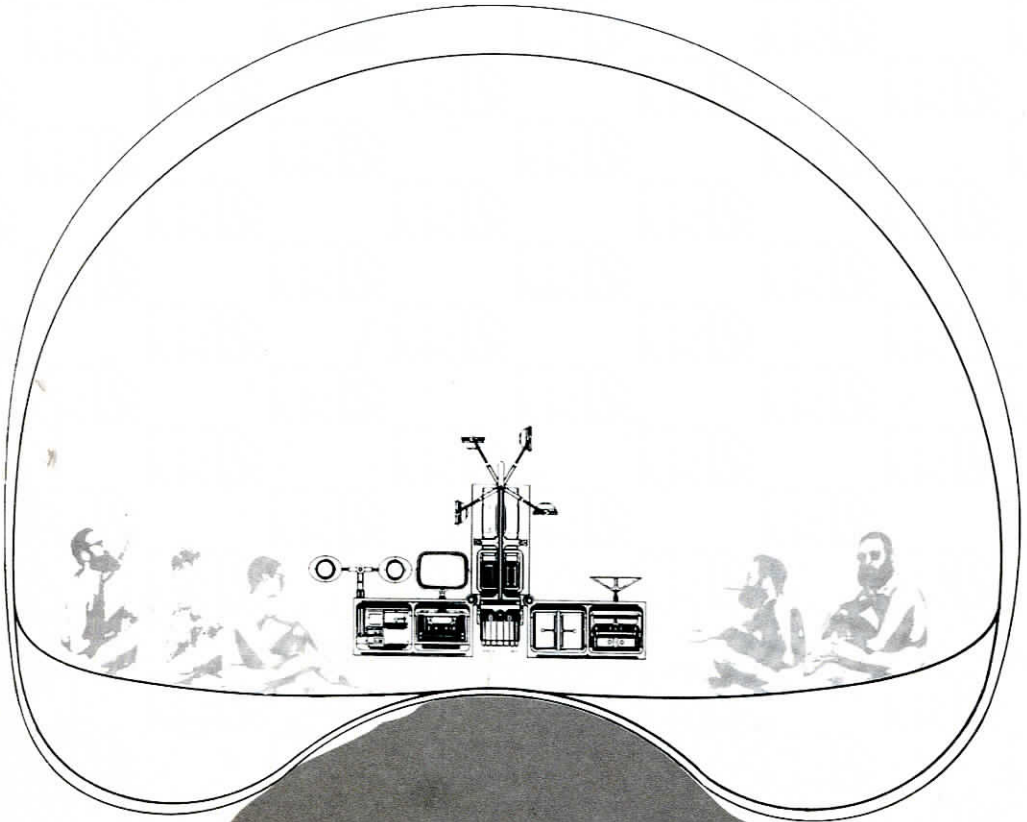
GERARD DERMANIS JR
JON YODER
ALBERT MARICHAL

"We live in a throw-away economy, a culture in which the most fundamental classification of our ideas and worldy possessions is in terms of their relative expendability. Our buildings may stand for a millenium, but their mechanical equipment must be replaced in fifty years, their furniture in twenty."

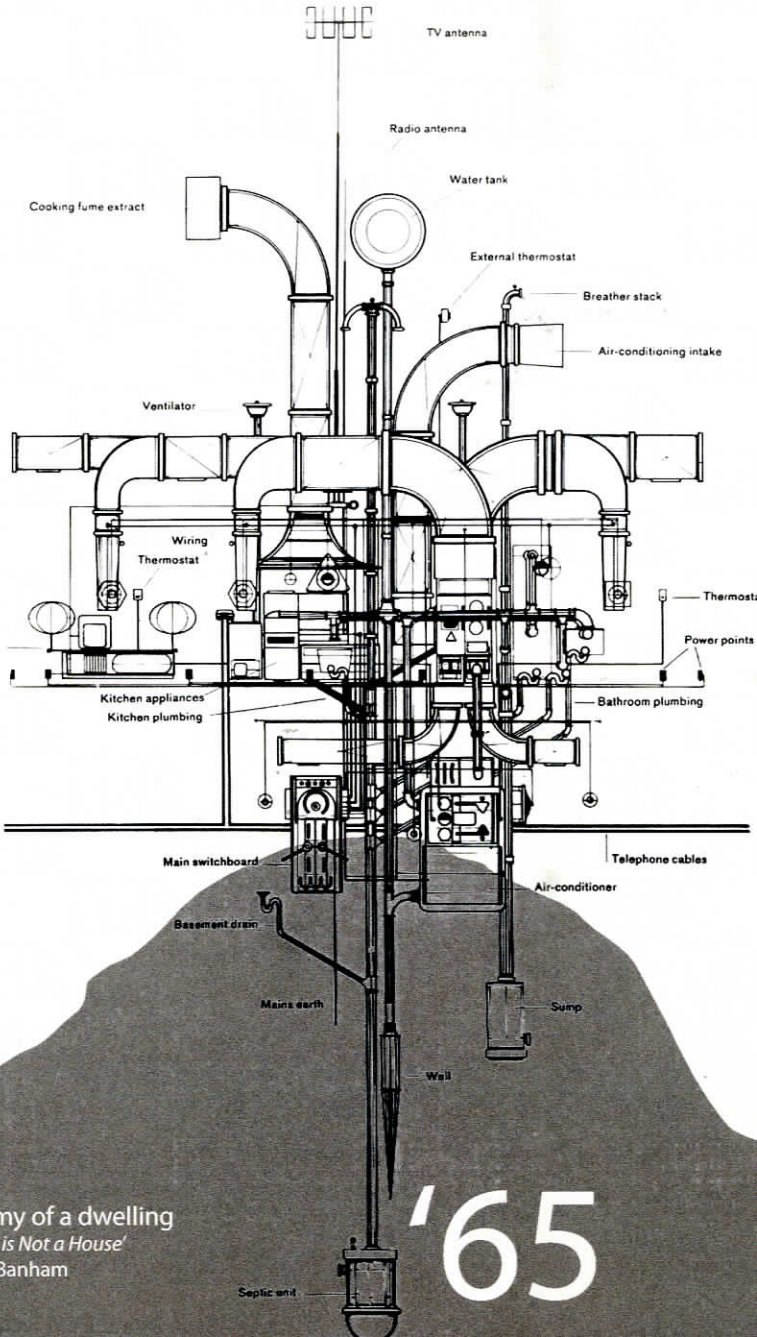
-Reyner Banham

'A throw-away Aesthetic', 1955

'55



the environment-bubble
'A Home is Not a House'
Reynor Banham



anatomy of a dwelling
'A Home is Not a House'
Reynor Banham

'65

ADAPT

responds to various functions
requires permanent framework

TRANSFORM

allows for physical alterations
spacial reconfiguration

MOVE

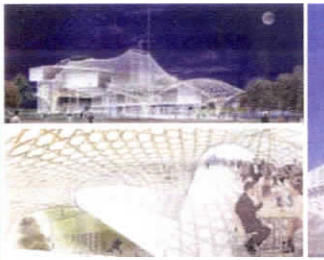
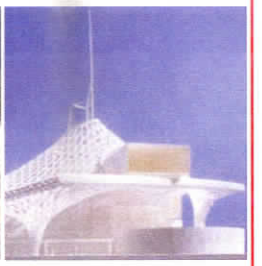
requires mechanical means to relocate
allows transport / instant setup
modular

INTERACT

intelligent automation or reaction
relies on predetermined algorithms


Centre Pompidou, france 1968
Richard Rogers - Renzo Piano


Optima Homes, UK 2004
Cartwright Packard

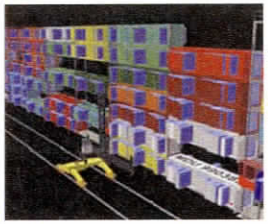



Centre Pompidou, France 2007
Shigeru Ban


Curtain Wall House, Tokyo Japan 1995
Richard Rogers - Renzo Piano

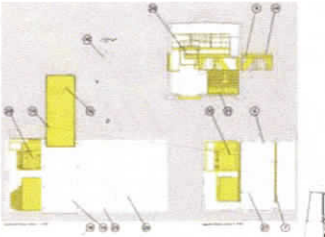
Hoberman Arch, Salt Lake City USA 2002
Chuck Hoberman


Pro/con Package Homes, 2007
Jones, Partners: architecture

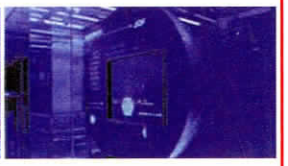



Mobile Dwelling Unit, USA 2003
LOT-EK


Halley VI Antartica Base, 2005
Hugh Broughton Architects




SCI-Arc Conference Room, Los Angelas 2004
Jones, Partners: architecture

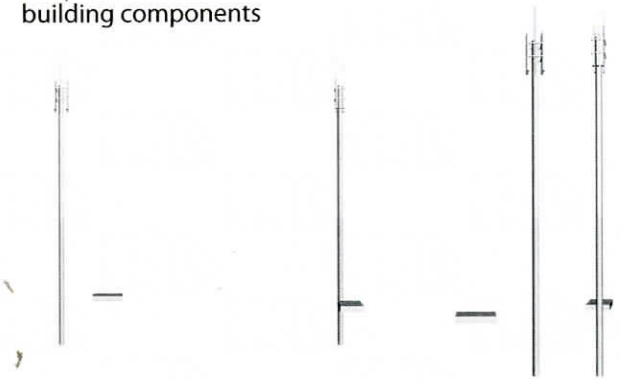
Hong Kong RTHK AI media lab, Hong Kong 2001
James Law Cybertecture



SmartWrap Building, New York USA 2003
Kieran Timberlake Associates


Public Mood Ring, 2007
Will Pappenheimer

building components



cellular components

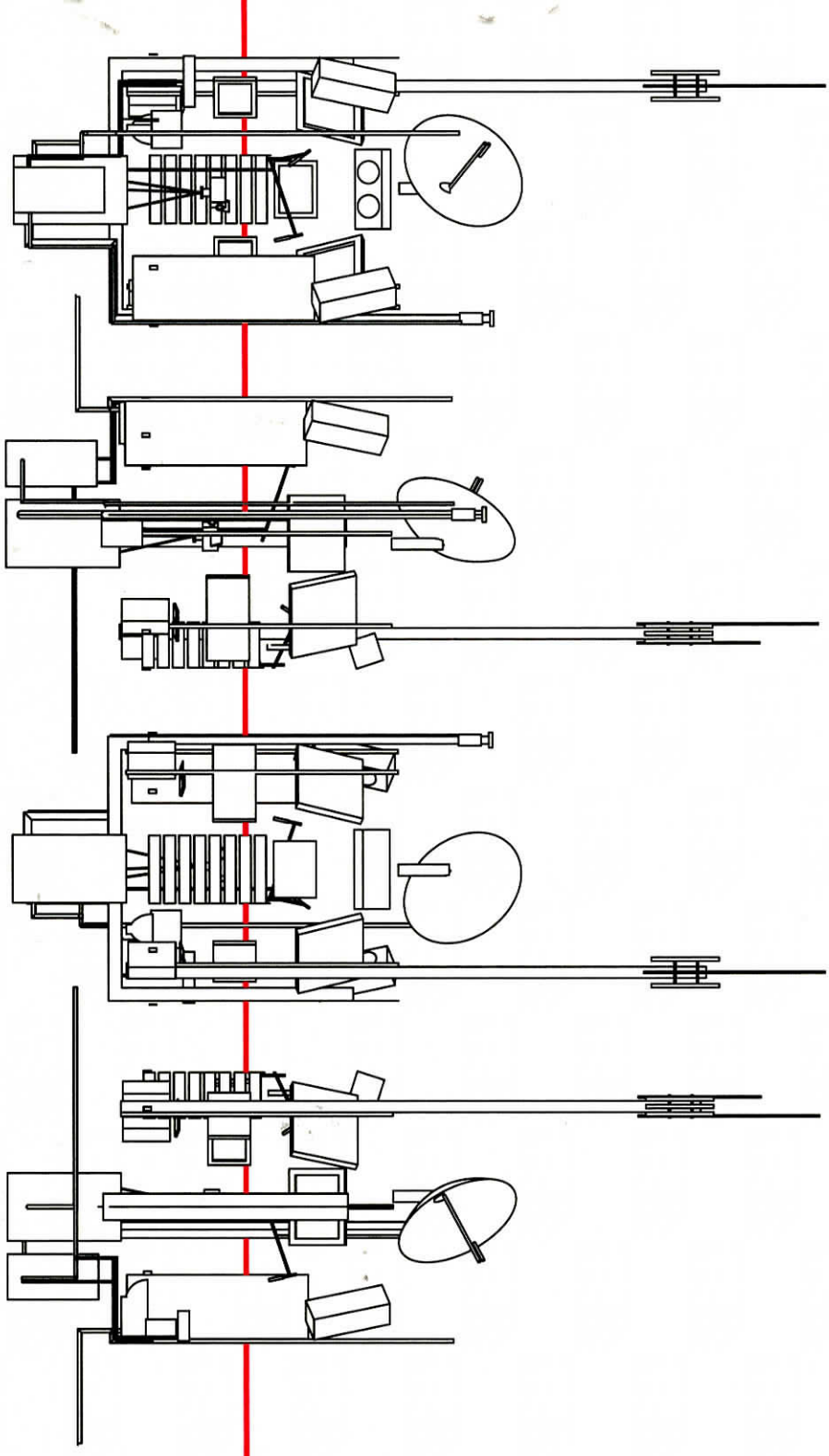
internet components

television components

radio components

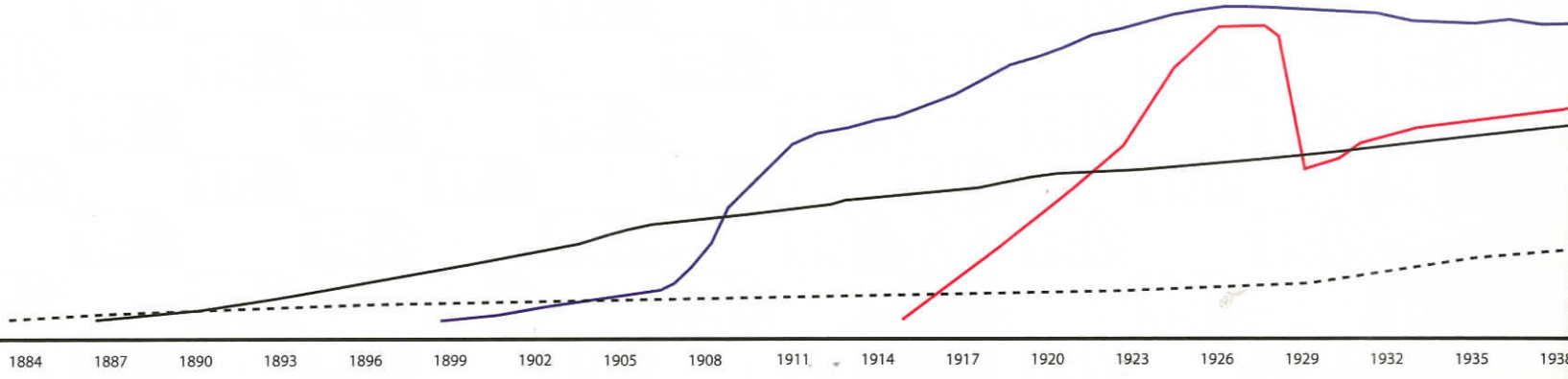
MEDIA CENTER

component analysis



INSERT
INDEPENDANT
THIRD-PARTY
VARIABLE
HERE

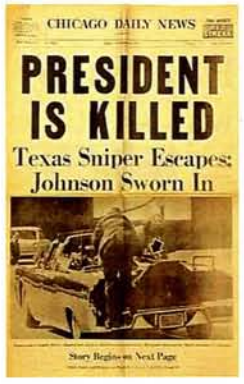
INFUSION OF MEDIA

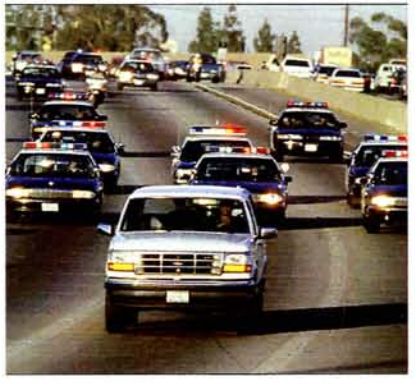


composite

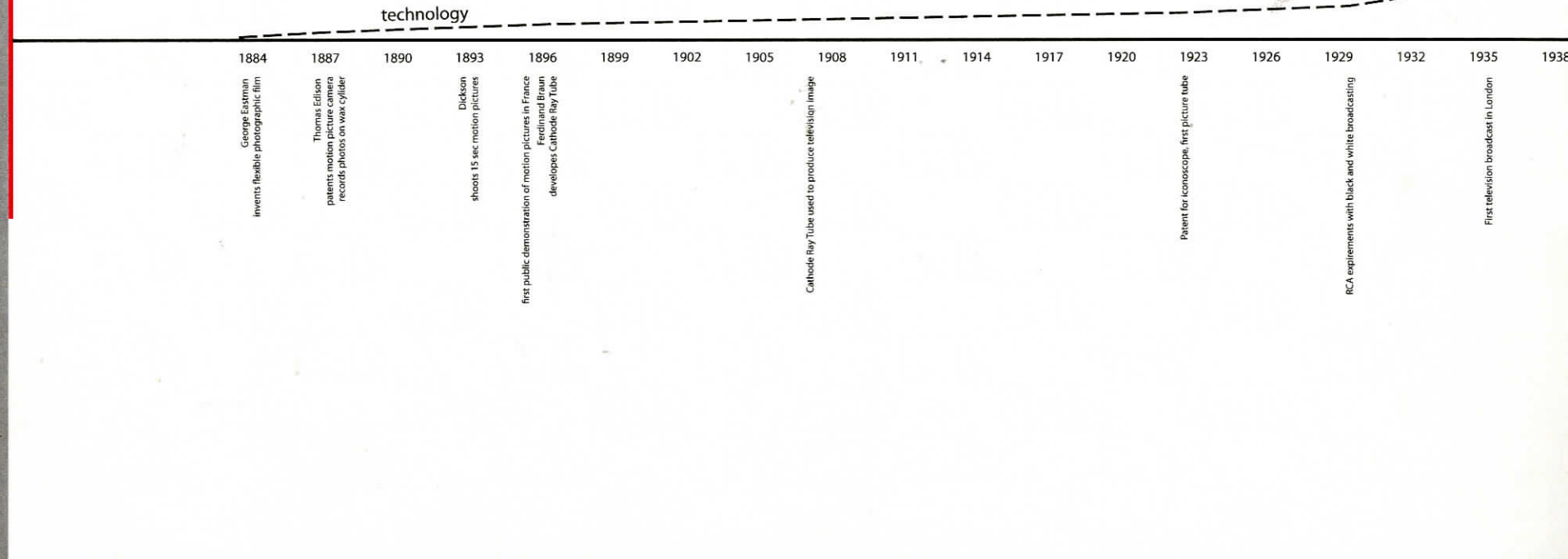
information streams

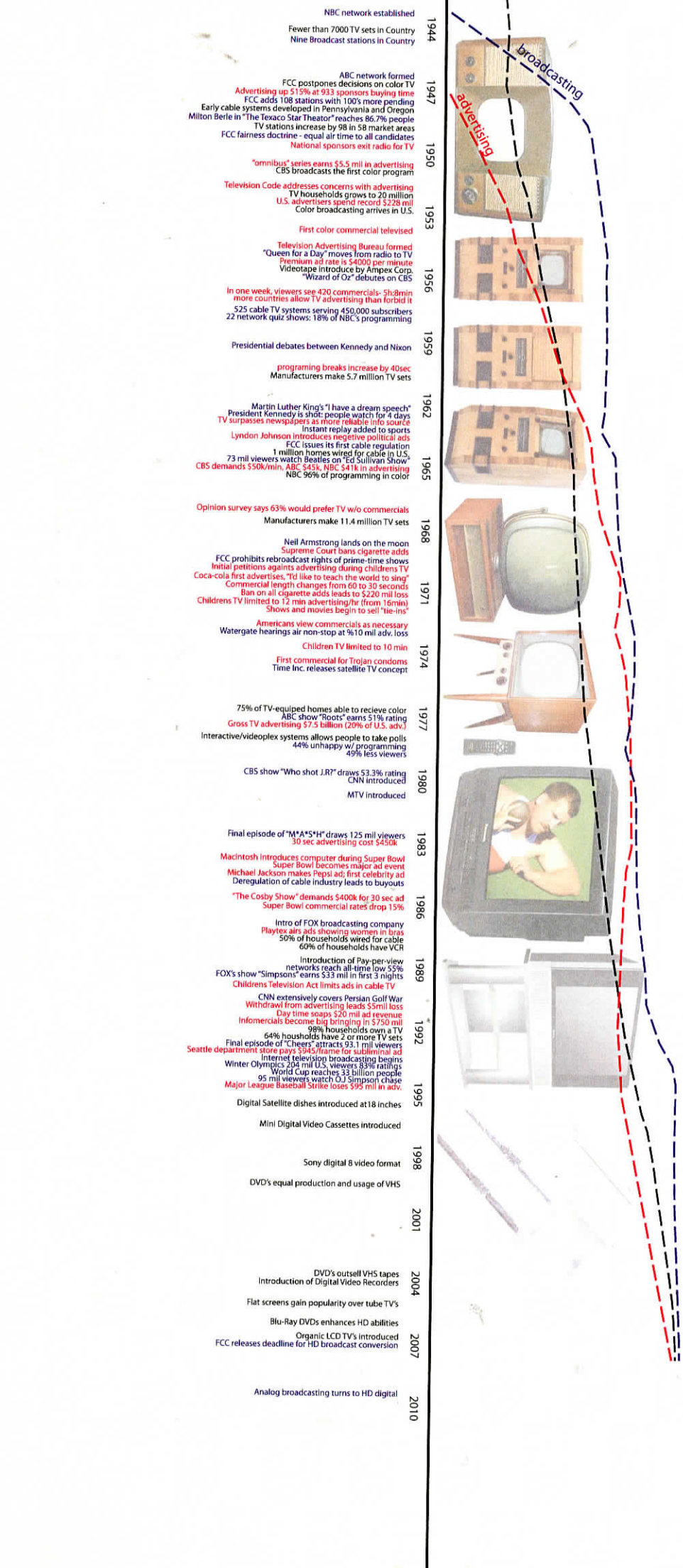
1944 1947 1950 1953 1956 1959 1962 1965 1968 1971 1974 1977 1980 1983 1986 1989 1992 1995 1998 2001 2004 2007 2010





television


technology
1884
George Eastman
invents flexible photographic film
1887
Thomas Edison
patents motion picture camera
records photos on wax cylider
1890
1893
Dickson
shoots 15 sec motion pictures
1896
first public demonstration of motion pictures in France
Ferdinand Braun
developes Cathode Ray Tube
1899
1902
1905
1908
Cathode Ray Tube used to produce television image
1911
1914
1917
1920
1923
Patent for iconoscope, first picture tube
1926
1929
RCA expirements with black and white broadcasting
1932
1935
First television broadcast in London
1938



1944
NBC network established
Fewer than 7000 TV sets in Country
Nine Broadcast stations in Country

1947
ABC network formed
FCC postpones decisions on color TV
Advertising up 515% at 933 sponsors buying time
FCC adds 108 stations with 100's more pending
Early cable systems developed in Pennsylvania and Oregon
Milton Berle in "The Texaco Star Theator" reaches 86.7% people
TV stations increase by 98 in 58 market areas
FCC fairness doctrine - equal air time to all candidates
National sponsors exit radio for TV

1950
"omnibus" series earns $5.5 mil in advertising
CBS broadcasts the first color program
Television Code addresses concerns with advertising
TV households grows to 20 million
U.S. advertisers spend record $228 mil
Color broadcasting arrives in U.S.

1953
First color commercial televised
Television Advertising Bureau formed
"Queen for a Day" moves from radio to TV
Premium ad rate is $4000 per minute
Videotape introduce by Ampex Corp.
"Wizard of Oz" debutes on CBS

1956
In one week, viewers see 420 commercials- 5h:8min
more countries allow TV advertising than forbid it
525 cable TV systems serving 450,000 subscribers
22 network quiz shows: 18% of NBC's programming

1959
Presidential debates between Kennedy and Nixon
programing breaks increase by 40sec
Manufacturers make 5.7 million TV sets

1962
Martin Luther King's "I have a dream speech"
President Kennedy is shot: people watch for 4 days
TV surpasses newspapers as more reliable info source
Instant replay added to sports
Lyndon Johnson introduces negetive political ads
FCC issues its first cable regulation
1 million homes wired for cable in U.S.
73 mil viewers watch Beatles on "Ed Sullivan Show"
CBS demands $50k/min, ABC $45k, NBC $41k in advertising
NBC 96% of programming in color

1965
Opinion survey says 63% would prefer TV w/o commercials
Manufacturers make 11.4 million TV sets

1968
Neil Armstrong lands on the moon
Supreme Court bans cigarette adds
FCC prohibits rebroadcast rights of prime-time shows
Initial petitions againts advertising during childrens TV
Coca-cola first advertises, "I'd like to teach the world to sing"
Commercial length changes from 60 to 30 seconds
Ban on all cigarette adds leads to $220 mil loss
Childrens TV limited to 12 min advertising/hr (from 16min)
Shows and movies begin to sell "tie-ins"

1971
Americans view commercials as necessary
Watergate hearings air non-stop at %10 mil adv. loss
Children TV limited to 10 min

1974
First commercial for Trojan condoms
Time Inc. releases satellite TV concept

1977
75% of TV-equiped homes able to recieve color
ABC show "Roots" earns 51% rating
Gross TV advertising $7.5 billion (20% of U.S. adv.)
Interactive/videoplex systems allows people to take polls
44% unhappy w/ programming
49% less viewers

1980
CBS show "Who shot J.R?" draws 53.3% rating
CNN introduced
MTV introduced

1983
Final episode of "M*A*S*H" draws 125 mil viewers
30 sec advertising cost $450k
Macintosh introduces computer during Super Bowl
Super Bowl becomes major ad event
Michael Jackson makes Pepsi ad; first celebrity ad
Deregulation of cable industry leads to buyouts

1986
"The Cosby Show" demands $400k for 30 sec ad
Super Bowl commercial rates drop 15%

1989
Intro of FOX broadcasting company
Playtex airs ads showing women in bras
50% of households wired for cable
60% of households have VCR
Introduction of Pay-per-view
networks reach all-time low 55%
FOX's show "Simpsons" earns $33 mil in first 3 nights
Childrens Television Act limits ads in cable TV

1992
CNN extensively covers Persian Golf War
Withdrawl from advertising leads $5mil loss
Day time soaps $20 mil ad revenue
Infomercials become big bringing in $750 mil
98% households own a TV
64% housholds have 2 or more TV sets
Final episode of "Cheers" attracts 93.1 mil viewers
Seattle department store pays $945/frame for subliminal ad
Internet television broadcasting begins
Winter Olympics 204 mil U.S. viewers 83% ratings
World Cup reaches 33 billion people
95 mil viewers watch OJ Simpson chase
Major League Baseball Strike loses $95 mil in adv.

1995
Digital Satellite dishes introduced at18 inches
Mini Digital Video Cassettes introduced

1998
Sony digital 8 video format
DVD's equal production and usage of VHS

2001
DVD's outsell VHS tapes
Introduction of Digital Video Recorders

2004
Flat screens gain popularity over tube TV's
Blu-Ray DVDs enhances HD abilities
Organic LCD TV's introduced
FCC releases deadline for HD broadcast conversion

2007
Analog broadcasting turns to HD digital

2010

radio

technology
broadcasting
advertising
1884
1887
1890
1893
1896
1899
1902
1905
1908
1911
1914
1917
1920
1923
1926
1929
1932
1935
1938
Heinrich Hertz
First detected electrical waves by spark
Edison patents "transmission of signals electrically"
Harnessed waves with oscillator and resonator
Marconi makes a bell ring using radio waves
Wireless transmission across English Channel
Duddell discovers electric arcs tunable to audio frequency
Fessenden first to transmit voice over spark transmitter
Marconi sends first transatlantic radio signal
First regular transatlantic radio broadcast b/n US & England
Spark transmitters used by U.S. Navy
Continuous-wave voice transmitter tested
AM radio invented
First radio set marketed- Telimco
"SOS" adopted as internation radio distress signal
Fessenden first to broadcast music, Mass
Eugenia Ferrar first singer to broadcast live, Brooklyn
DeForrest transmits voice and music over 500 miles
amateur interest in radio explodes, NYC
First amateur radio club, NYC
First radio rescue at sea
First radio contest held, Philadelphia
Westinhouse buys patent for heterodyne receiver
First radio message from an airplane
Edwin Herrold begins first regular broadcasting
After Titanic sank, all Marconi receivers had to be monitored
Radio act attempts to limit interference between broadcasters
AT&T developes the amplifying vacuum tube
Armstrong patents regenerative circut
Fred Christian transmits from bedroom in Hollywood
First radio telephone communication
First coast-to-coast telephony
First transcontinental radio broadcast
Radio parts are advertised, first use of radio for advertising
Fed Gov takes control of radio stations, WWI
Conrad broadcasts music in Pittsburgh - 8XK
Superheterodyne receiver invented
Debates begin on how to make money on radio
RCA seeks mass production of "radio music boxes"
First radio communication with a submersed sub
RCA buys patent for superheterodyne
First commercial radio station broadcasts
Station WWJ in Detroit is licensed
First prize fight broadcast, Dempsey-Miske
First religious service broadcast, Pittsburgh
First paid radio commercial broadcasted at $100 for 10 min
NY station WJZ first live studio audiance broadcast
First coast-to-coast broadcast of a football game
Business owners notice an increase in sales with broadcasting
Hazeltine Corp. developes autodyne receiver
high tower, far reaching, coast to coast transmitters
First multi-station broadcast, Pres. Coolidge inauguration
Midcontinent chain of 6 stations
First photo sent by commercial radio across Atlantic
First radio jingle broadcasted, Portland MN
United Independent Broadcasters begins with 16 stations
"Dodge Victory Hour" reaches 35 million people
Advertisers pay $4 million for airtime
CBS affiliates with 47 broadcast stations
One-way police radio communication
NBC sets up first permanent coast-to-coast network
Radio broadcasts reach 3 million homes, 60 stations
NAB bans radio commercials from airing between 7 & 11 pm
Advertising plumits after the stock market crash
FM transmission developed
"Right Crust Daughtoys" - first music group devoted to advertising
Stations rely on "pay as you play" music royalty system
Hoover vs. Roosevelt campaign on radio
Two-way police radio communication
First transmission heard in arctic & antartica
U.S. Federal Communications Act sets up FCC
Muzac, business music, association is formed
BBC airs first news story
First FM radio station built
NBC forms first orchestra exclusively for radio
Orson Welles "invasion from Mars" broadcast
First baseball broadcast,

Pepsi-cola hist the air" first jingle on national radio
"Chik[illegible]a" jingle h[illegible]ime. Play[illegible]es/day

1944 Radioastronomy developed
First international sporting event broadcasted

1947 U.S. Army bounces radar beam off Moon
Transistor invented making radios smaller

1950 Facsimile high-speed radio transmission demonstrated

1953 Folk music becomes popular for advertising

1956 CBS and NBC shift focus to television broadcasting

Final episode of "the shadow" airs after 24 years

Songs begin reaching no. 1 in charts after being in movies
Radio signal from Sputnik 1, first artificial satellite
First rock song to sell cereal "get that Ralston in the bowl"

1959 American Bandstant joins ABC television and sells most records ever

Communication with the first object to leave earth, USSR probe Luna 1
First radio-photos from spacecraft beyond Moon, USSR probe lunik 3
Integrated circuit (IC) introduced
First radio-photos of Earth Weather from orbit
Last day of radio soap operas

1962 First human communication from space

First radio signal from another planet, Mariner 2 at Venus
Majority of radio income comes from sponsorship

1965 First ground-to-aircraft transmission via satelite
Majority advertising is focused in televion

1968

1971

1974 Worlds tallest structure, 646m Polish radio tower built

1977

1980 Sony introduces consumer synthesized radio receiver
First human communication from a space shuttle

1983

1986

1989

1992 XM developes Satelite Radio

1995 Internet radio broadcasting begins

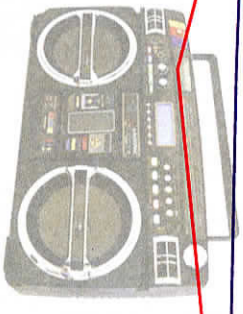
1998

2001 Digital radio released by XM

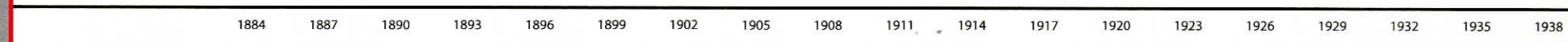
2004 Digital Radio Mondaile - digital AM radio

2007 Podcasting begins

2010



internet


1884
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1932
1935
1938

1944

1947

1950

1953

1956 ARPA formed in response to Sputnik

1959

1962 Kleinrock, MIT, "Information Flow in Large Communication Nets"
Licklider & Clark, MIT, "On-line Man Computer Communication"

1965 Baran, RAND, "On Distributed Communications Networks"
Computers at MIT connected via 1200bps phone line
First ARPANET plan released

1968 Packet switch contract to build Interface Message Processors (IMPs)

1971 ARPANET commisioned by DoD for networking research
First nodes established by BBN and AT&T
ALOHAnet becomes first packet radio network
AT&T sets up first cross-country link between UCLA and BBN
ARPANET start first host-to-host protocol (NCP)
15 nodes (23 hosts) established

1974 email is established using "@" sign
first computer-to-computer chat takes place at UCLA
first international connections within ARPANET between U.S, England, and Norway
Ethernet outlined
ARPANET users estimated at 2000 with email comprising 75% of traffic
Transmission Control Program (TCP) designed
first satellite links cross oceans from Hawaii and UK

1977 Queen Elizabeth II sends email
UNIX system developed

1980 THEORYNET provides email to 100 researchers in computer science
X.25 protocal standard for virtual circuit style packet switching
TCP splits into TCP and IP

1983 ARPA established the Internet Configuration Control Board (ICCB)

1986 First virus brings ARPANET to a halt

1989 BITNET created allowing file transfers
CSNET links more computer scientists
DoD declares TCP/IP to be standard for DoD

1992 Desktop workstation come into being
Domain Name System (DNS) introduced
Number of hosts grows to 1000

1995 Joint Academic Network (JANET) set up in UK
Whole Earth 'Lectronic Link (WELL) started
Symbolics.com becomes first registered domain name

1998 NSFNET uses 5 supercomputer to accelerate speed to 56Kbps

2001 CSNET provides first email link to China from Germany
Number of hosts reaches 10,000

2004 First internet worm destroys 10% of hosts world wide
Computer Emergency Response Team (CERT) formed
First multicast tunnel established
Number of hosts grows to 100,000

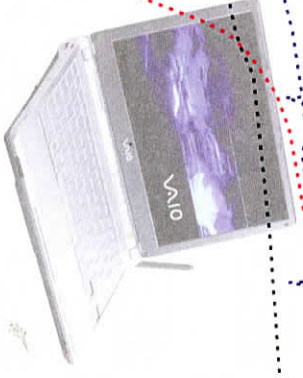
2007 First relays established between commercial email carrier and the Internet
ARPANET is shut down
World comes on-line becomes first commercial ISP

2010 Internet Toaster becomes first machine remotely controled by the internet
JANET IP Service is created
Number of hosts reaches 1,000,000
World Bank comes on-line
Term "surfing the Internet" is coined
US White House comes on-line
Internet talk radio begins
Business and media take notice of Internet
Shopping malls appear on-line
First virtual Cyber Bank opens
First banner adds appear on hotwired.com
Sun launches JAVA software
Vatican comes on-line
Internet Phones developed
ISP can't keep up with user demand
MCI upgrades to 13,000 ports bringing speeds from 155Mbps to 622Mbps
Domain name Business.com sells for $150,000
NASA is hacked into
Web size estimate to be 275-320 mil digital pages
Internet users able to jude performance of 12 world champion ice skaters
US Department of Commerce hacked into
US Supreme Court rules domain names are property and can be garnished
DoD requires US military be connected through NIPRNET instead of internet
Business.com sells for %7.5 mil
US timekeeper reports some time services show new year as 19100 on Jan 1
Series of domain name hijackings take place
First live distributed musical
Napster is shut down
Code Red worm and Sircam virus destroy thousands of webservers
First HDTV transmission across wide-are IP networks takes place
Blogging begins
US Law creates safe domain for kids - kids.us
First official on-line election takes place in Switzerland
SQL Slammer worm is worst in history destroying 911 and air traffic systems
For the first time in history, there are more servers outside the US

technology

broadcasting

advertising



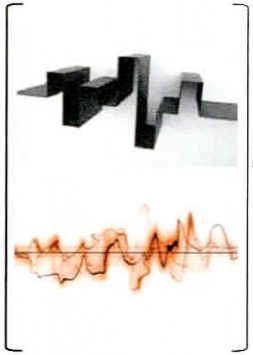
creation | product | broadcast | transfer | experience

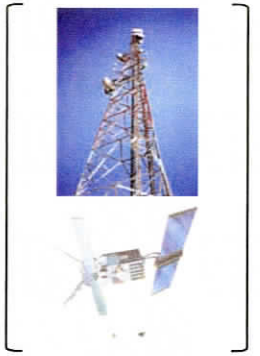
television



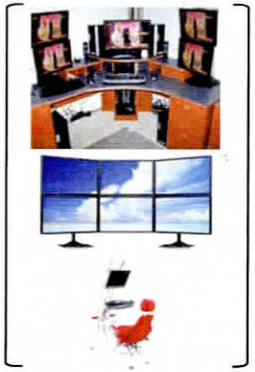


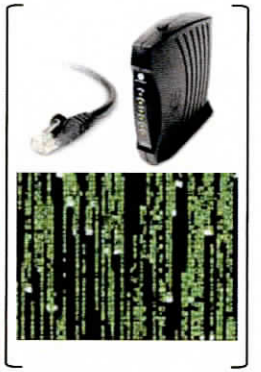
radio




internet



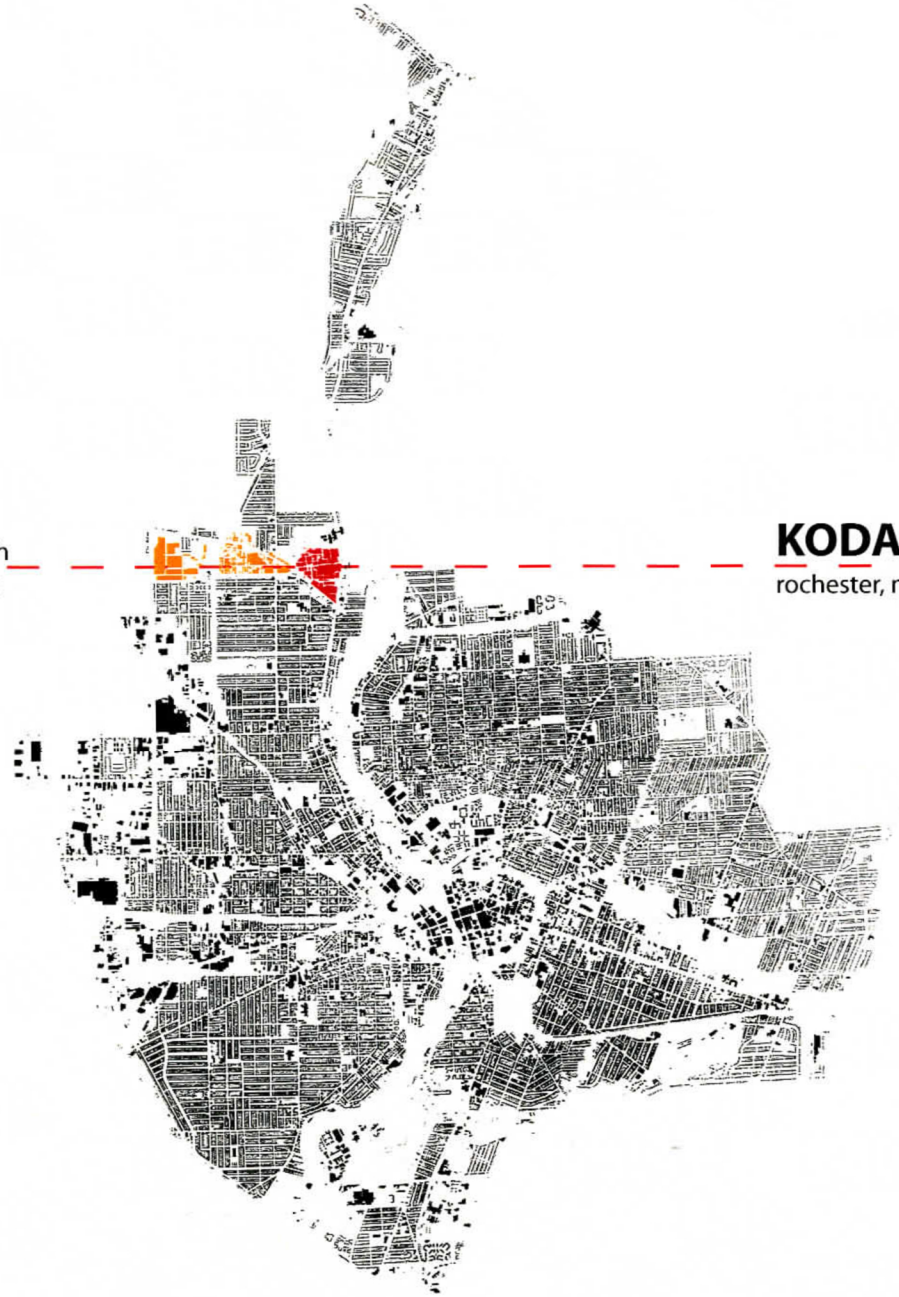

texture mapping

SITE QUALIFICATIONS

extensive media exposure / history

linear pedestrian movement

vehicular traffic exposure



43° 13′ 03.48″ north
77° 37′ 43.46″ west

KODAK PARK

rochester, new york

media

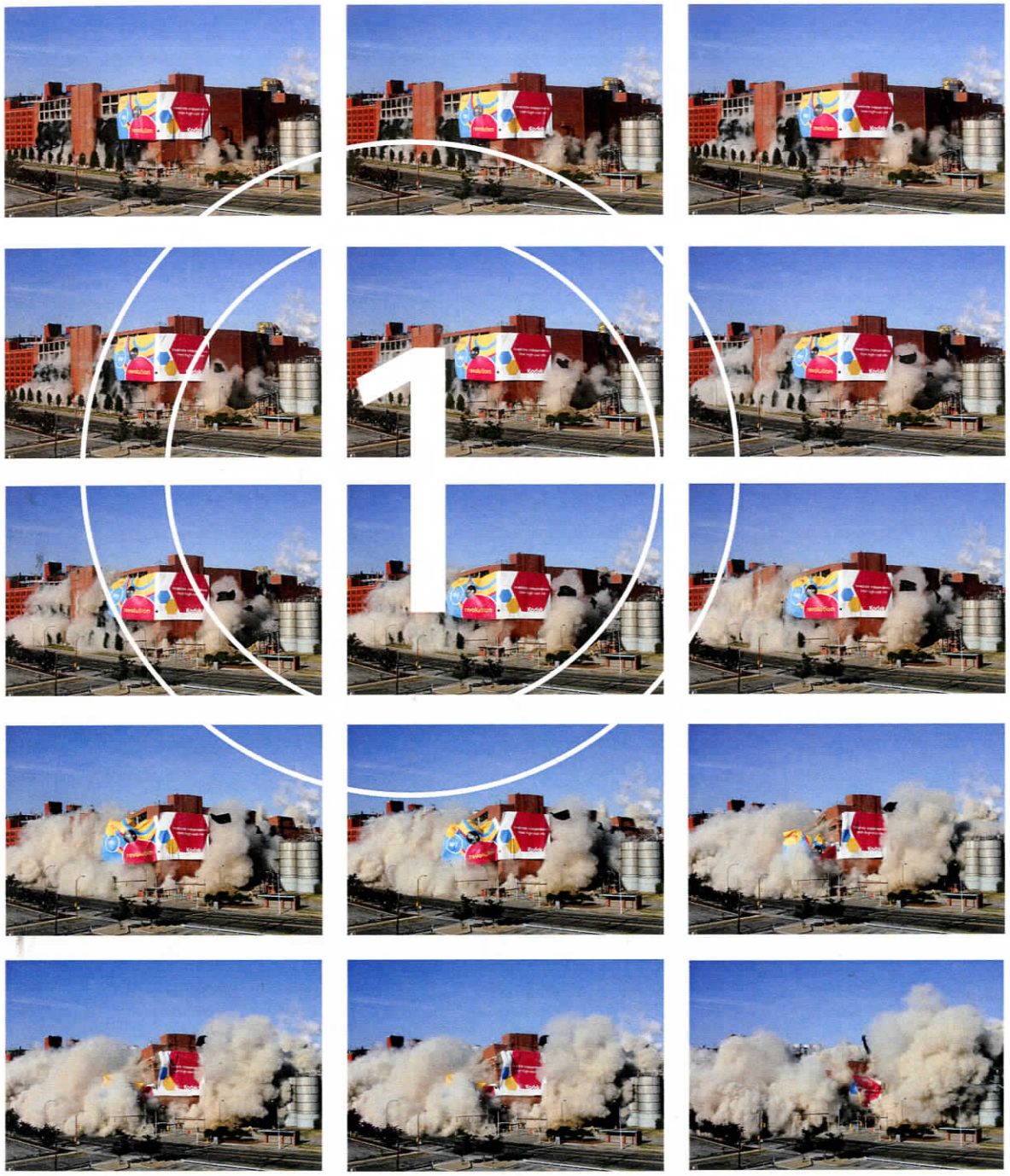
influence

3

2

“nice day for a revolution

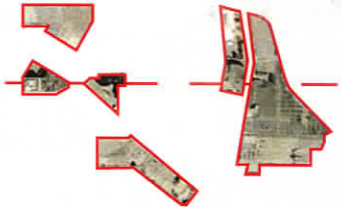
building 9 demolition, kodak park
july 1, 2007

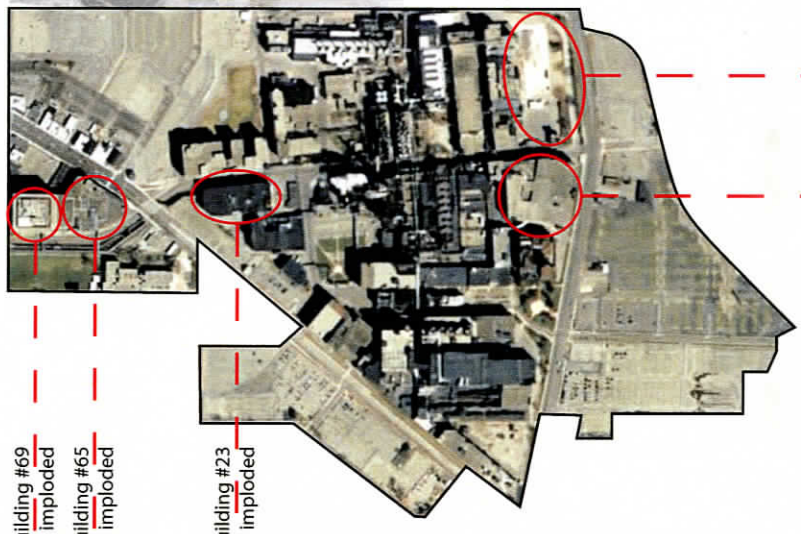


0:00

Port of Rochester
Charlotte, Rochester

Kodak Park, Eastman Kodak Company, Rochester, New York





building #50
dismantled

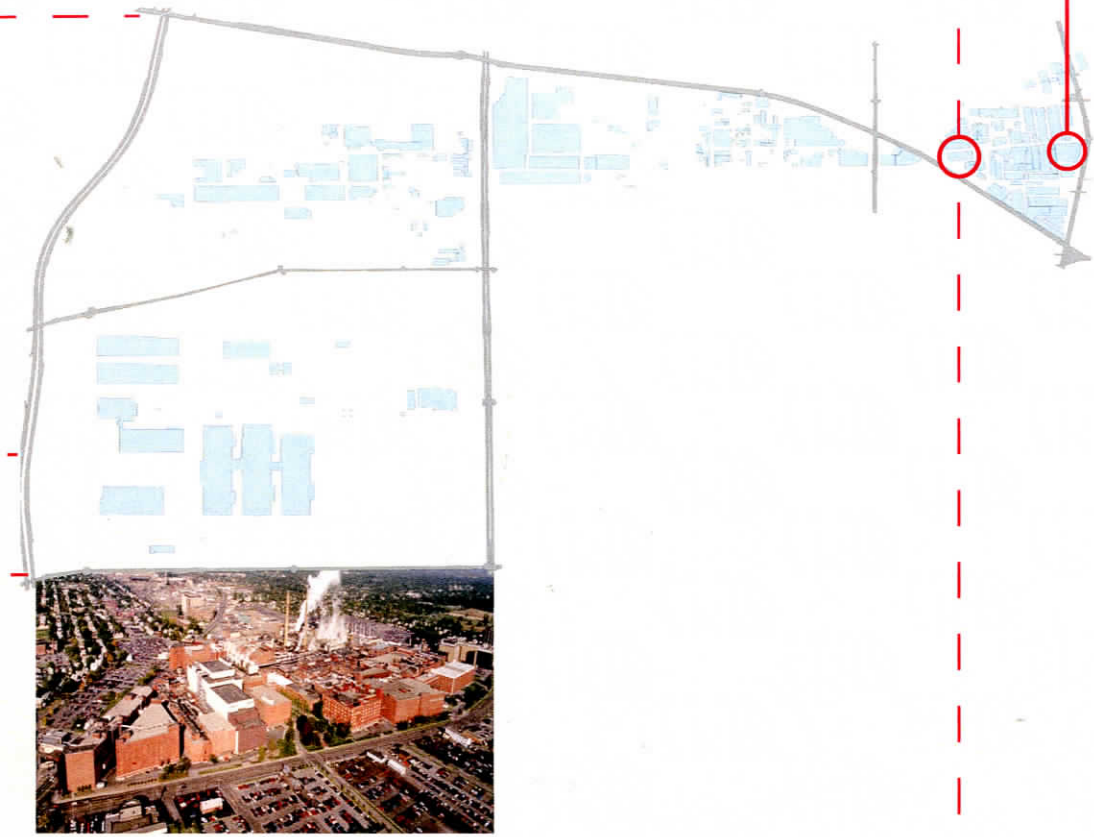
building #9
imploded

building #69
imploded

building #65
imploded

building #23
imploded

Downtown Inter-loop
Rochester



KODAK PARK aerial 2004

BUILDING 9 IMPLOSION

KODAK PARK aerial 2007

PROXIMITY TO WATER
genessee river, lake ontario, irondequoit bay

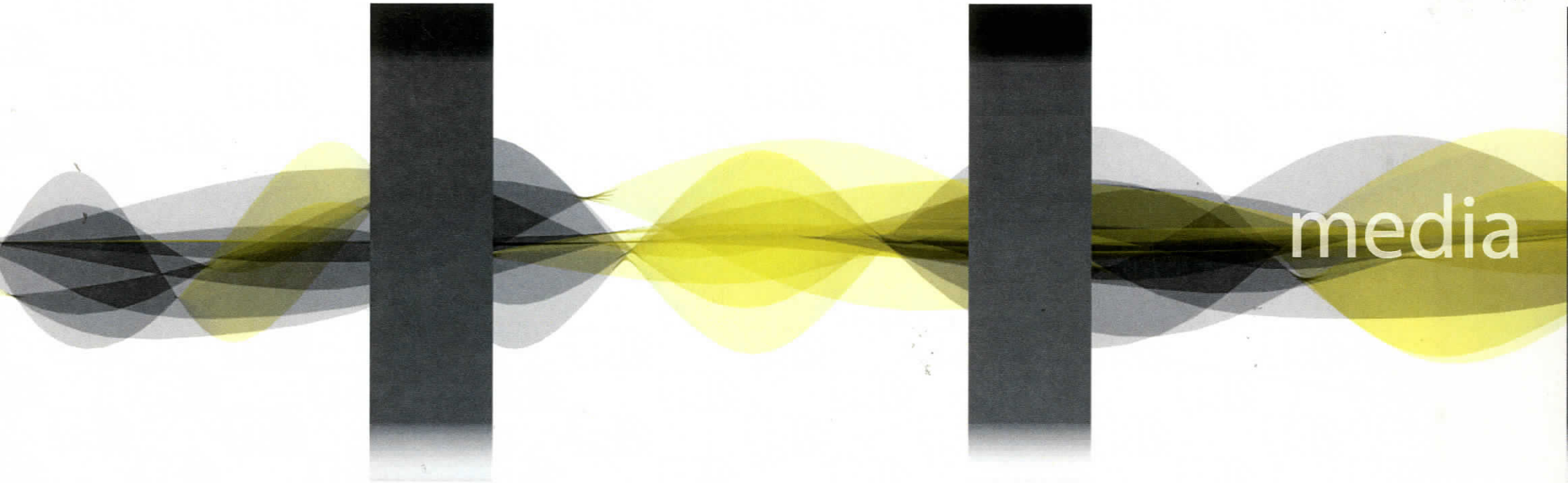
RELATIVE GREEN SPACES
turning point park, maplewood rose gardens

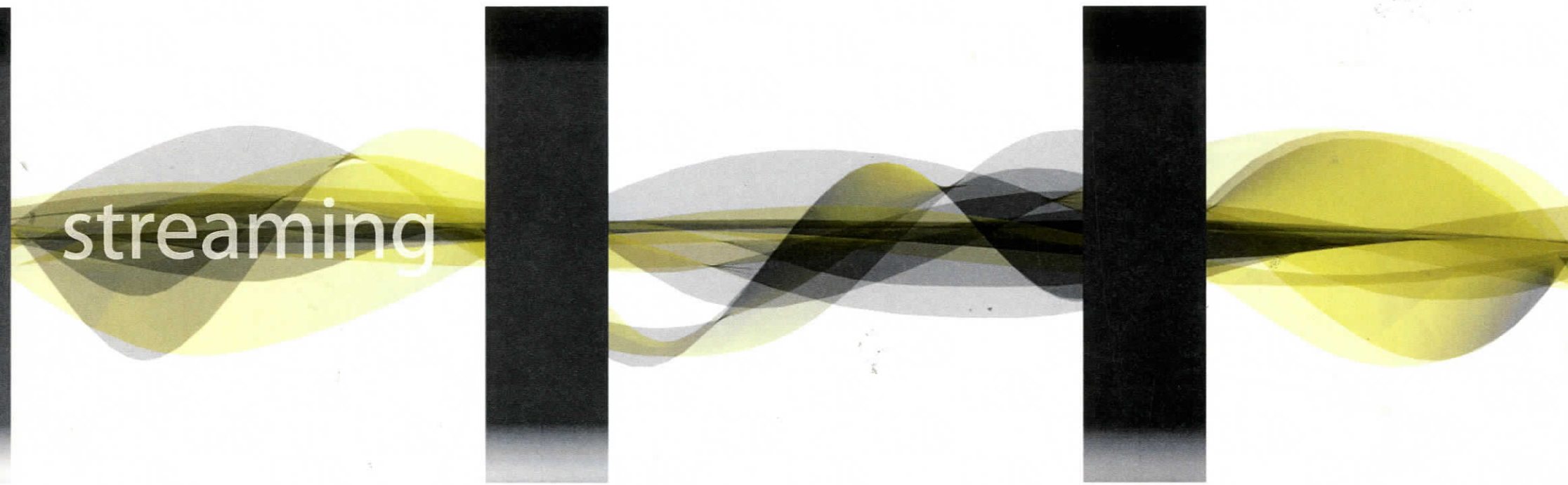
CITY CIRCULATION
ridge rd, lake ave, ridgeway junction

GENESSEE RIVER TRAIL
link between downtown and port of rochester

PROTOTYPE DEVELOPMENT

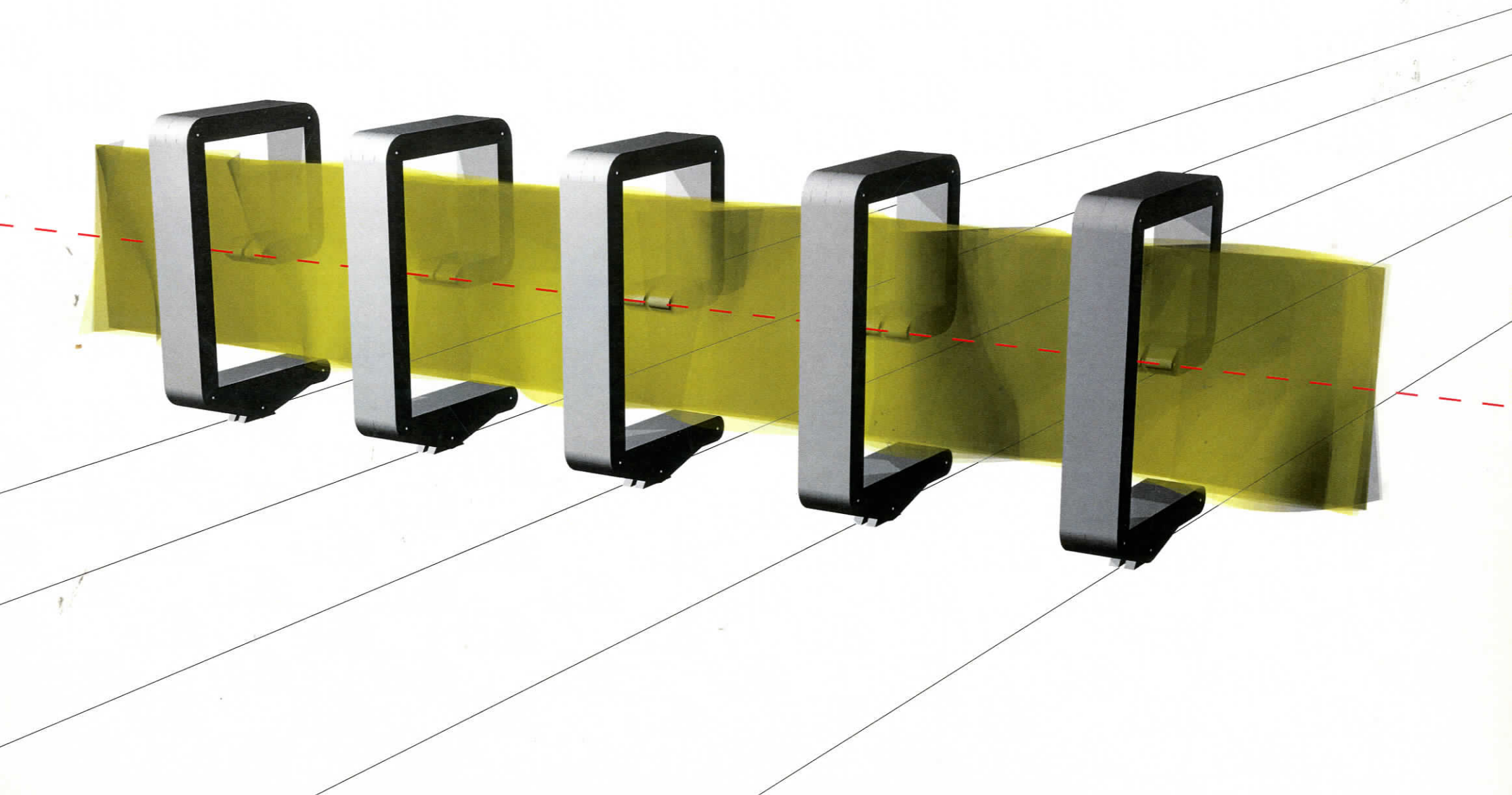
EXPLORATION OF SURFACE ARTICULATION AND EXPERIENCE

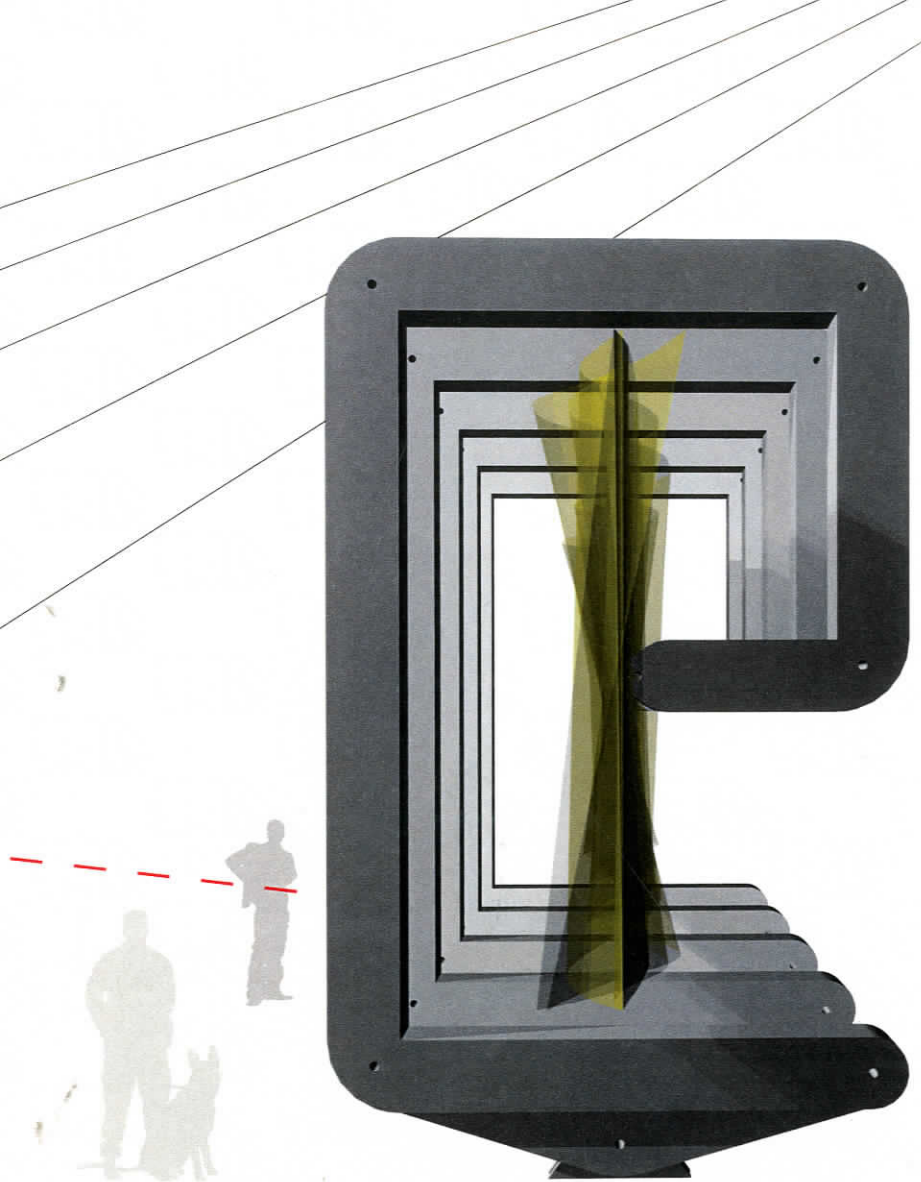



streaming

PROTOTYPE: v.1

VERTICLE SURFACE ARTICULATION





25%

50%

75%

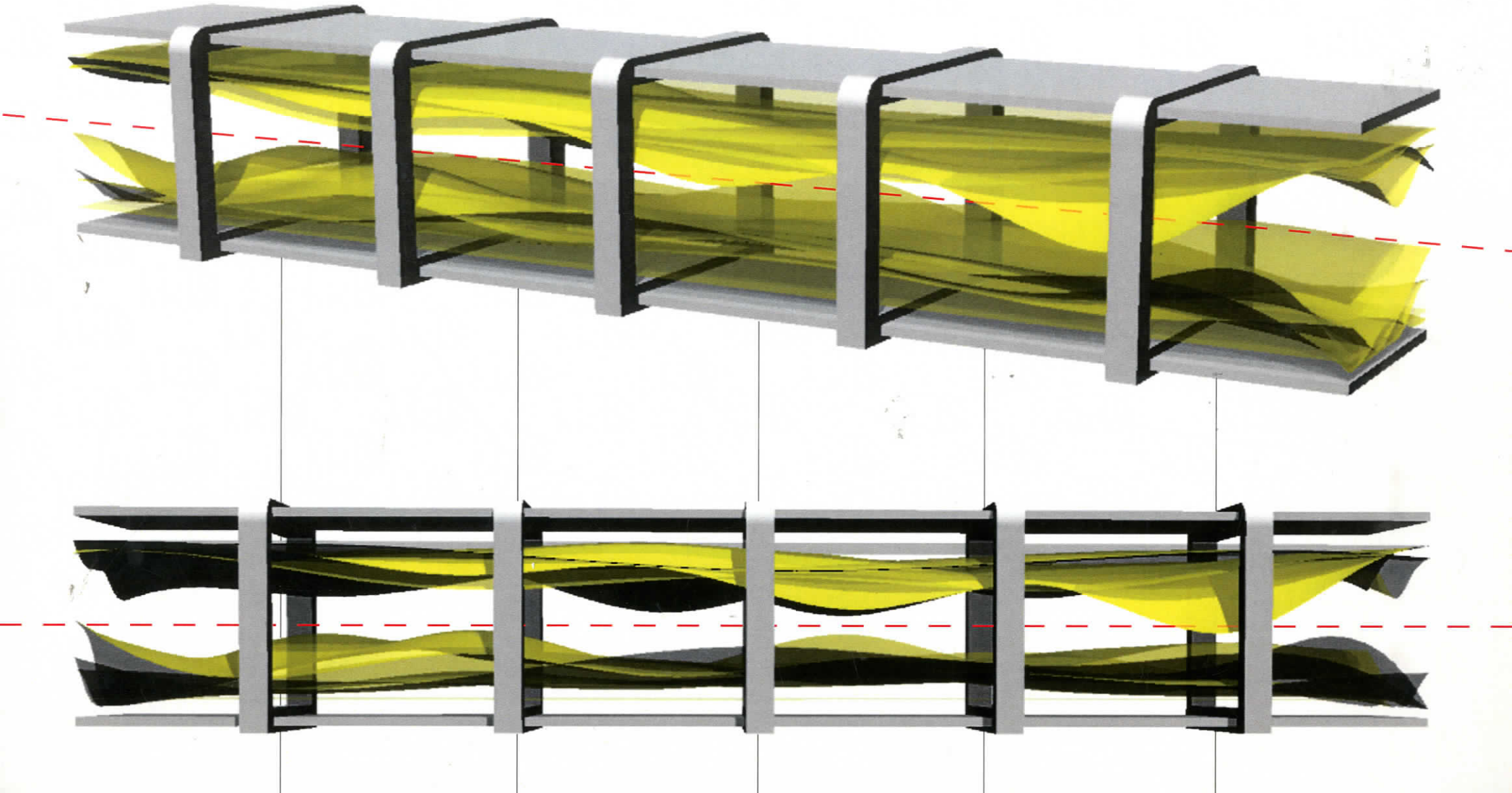
100%

site specificity

media usage

PROTOTYPE: h.1

HORIZONTAL SURFACE ARTICULATION



internal
experience

site specificity

media usage

25%

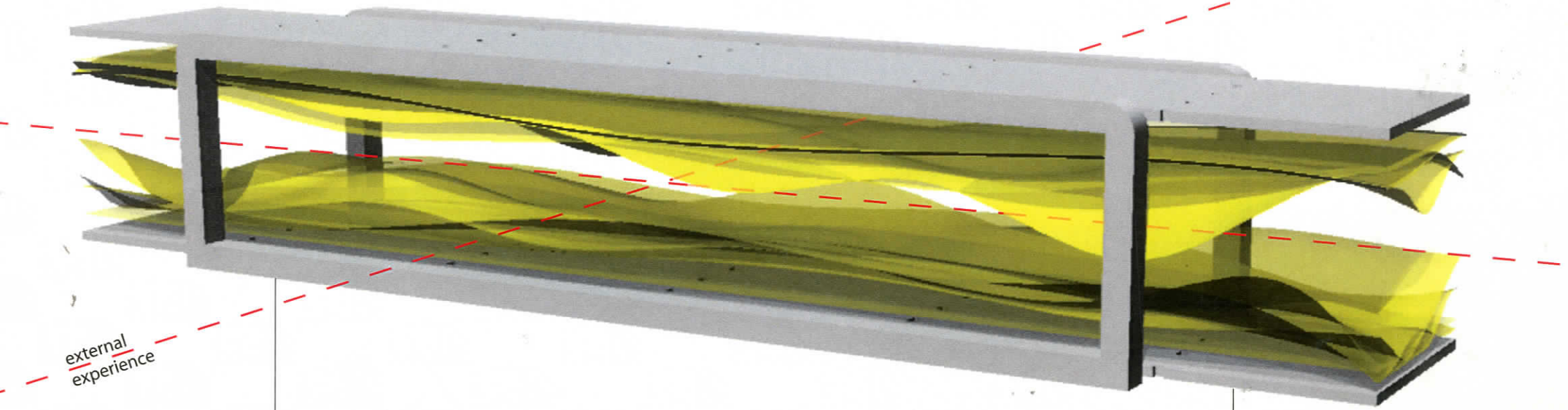
50%

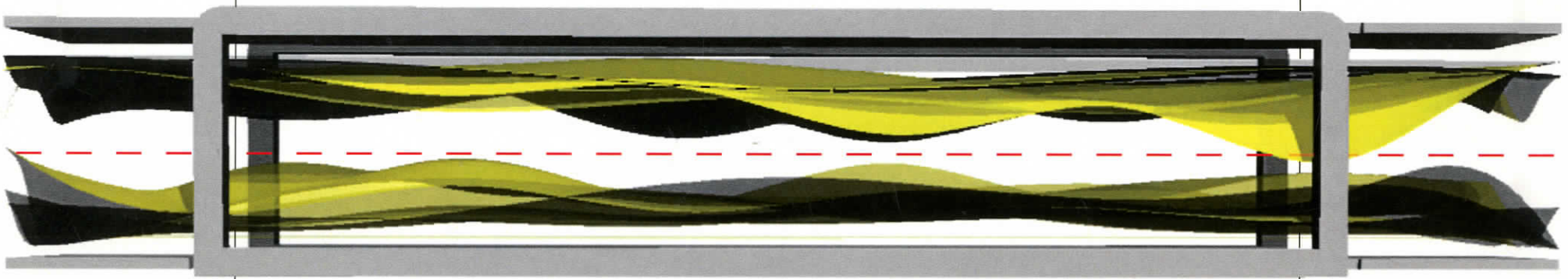
75%

100%

PROTOTYPE: h.2

HORIZONTAL SURFACE ARTICULATION





internal
experience

site specificity

media usage

25%

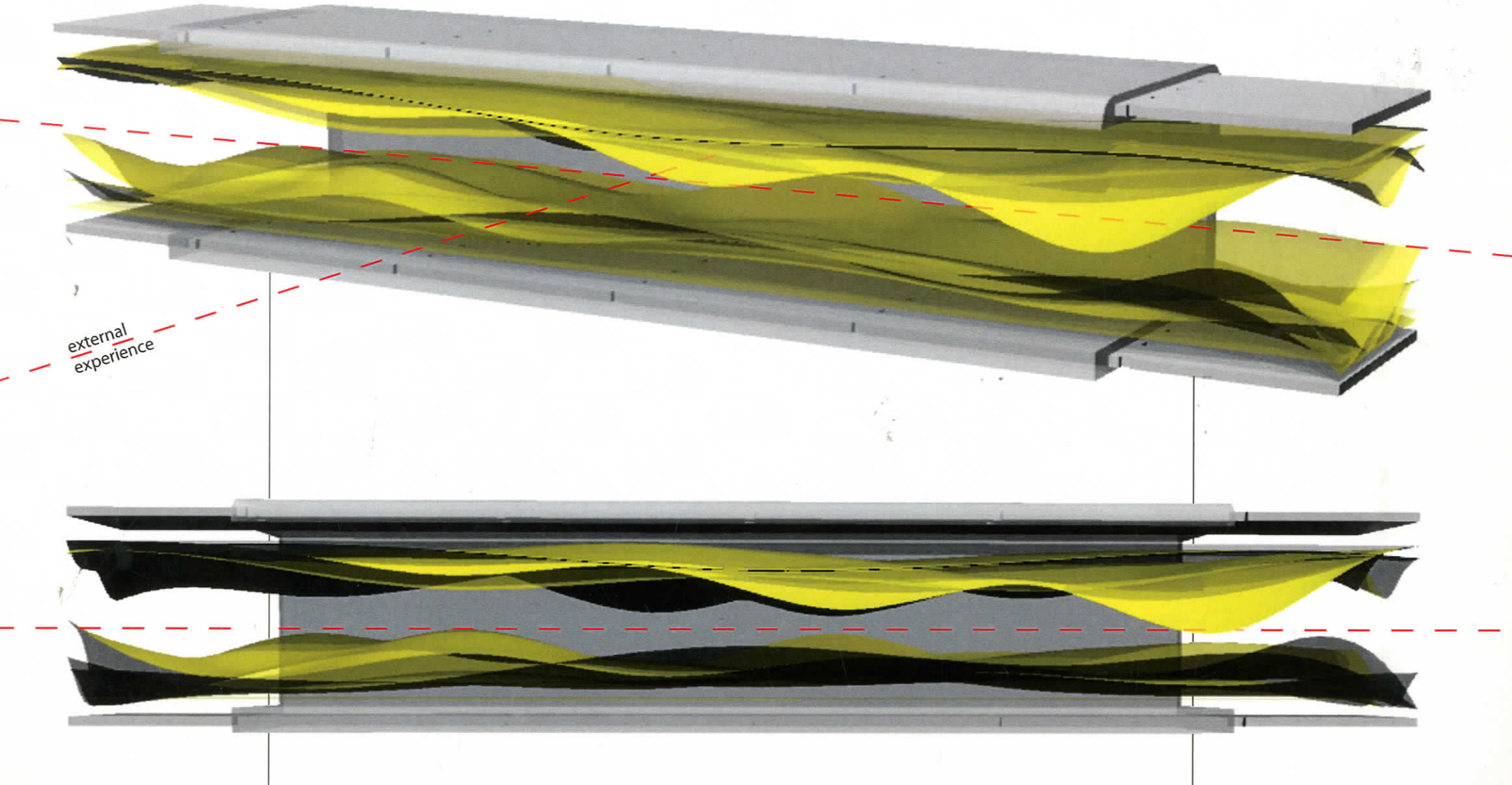
50%

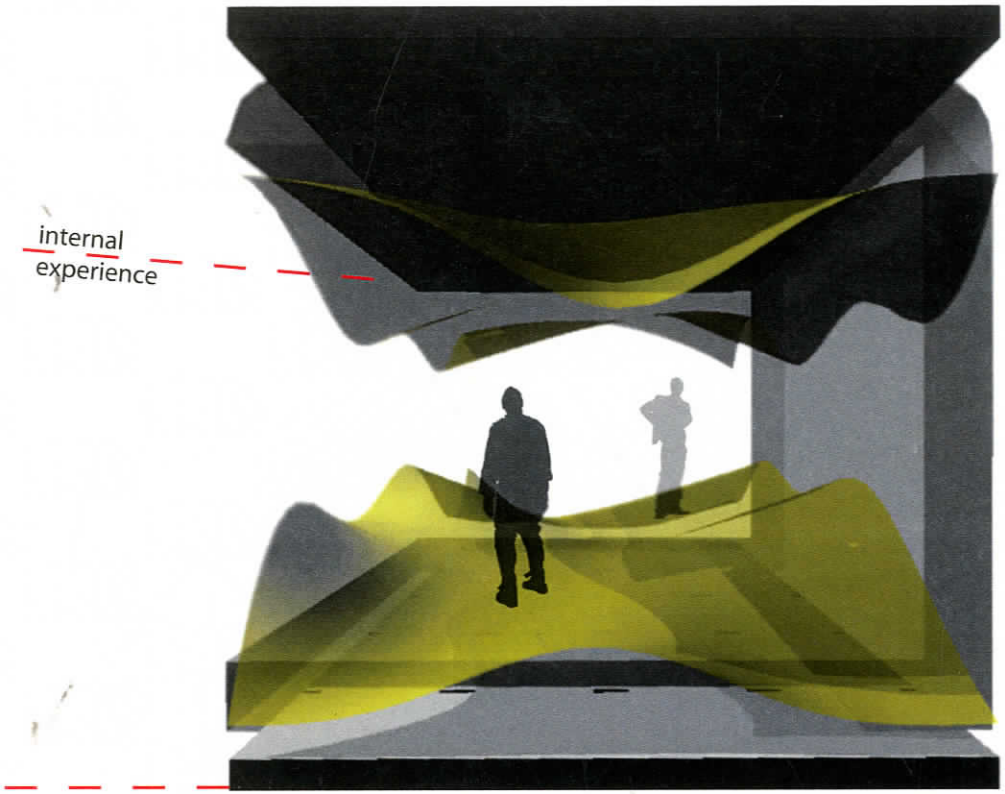
75%

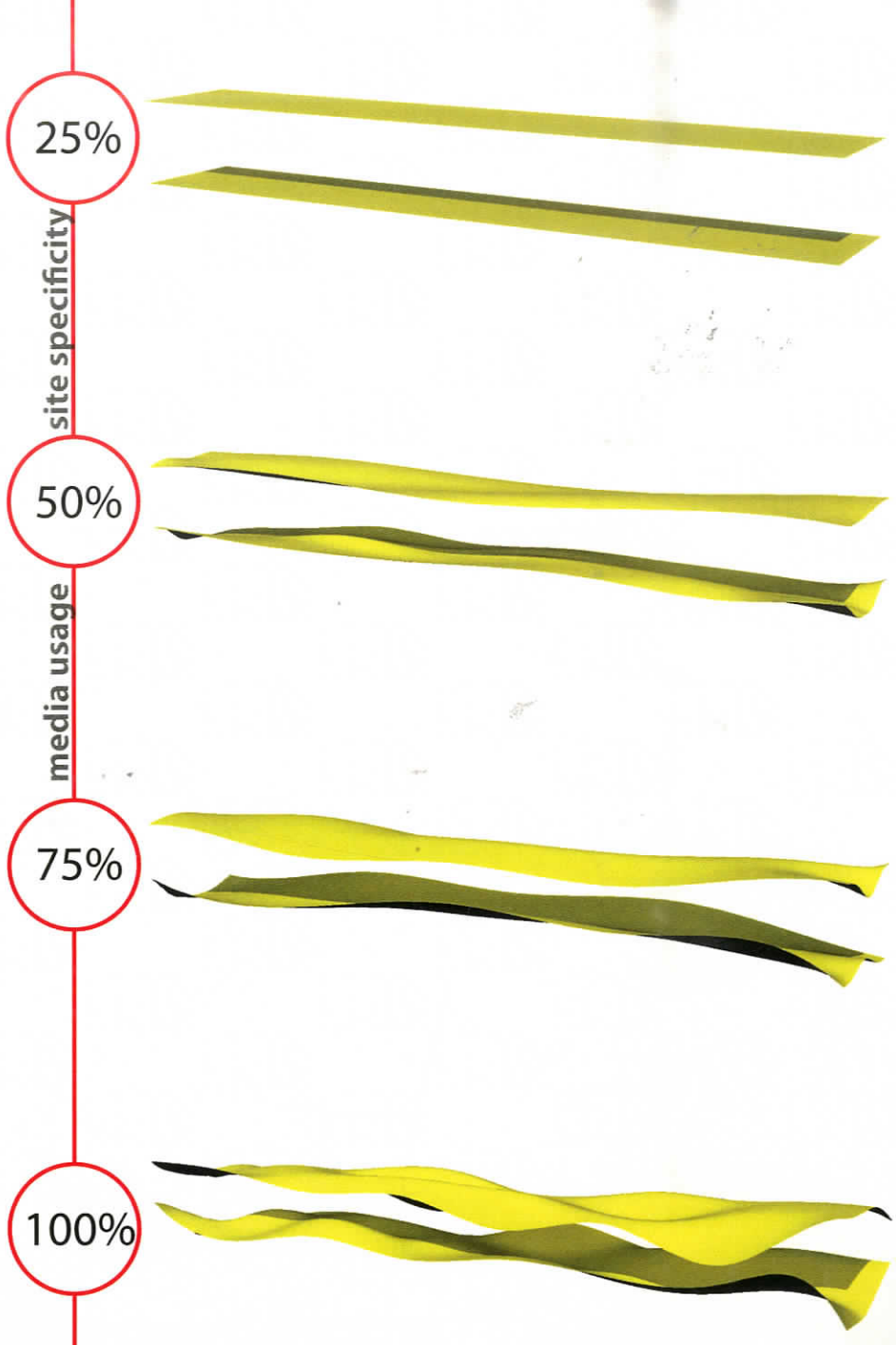
100%

PROTOTYPE: h.3

HORIZONTAL SURFACE ARTICULATION

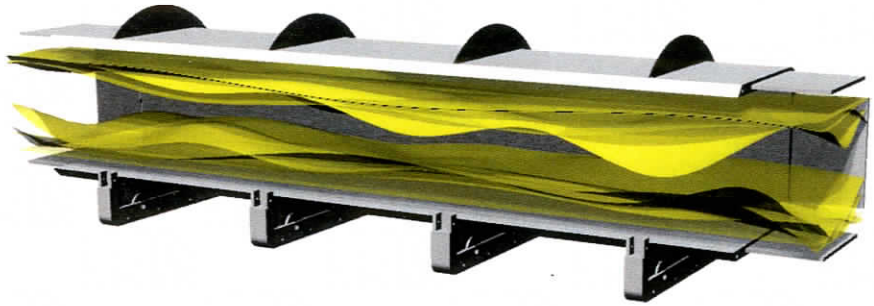



internal
experience


25%
site specificity
50%
media usage
75%
100%

PROTOTYPE: r.1

ROTATIONAL SURFACE ARTICULATION



25%

site specificity

50%

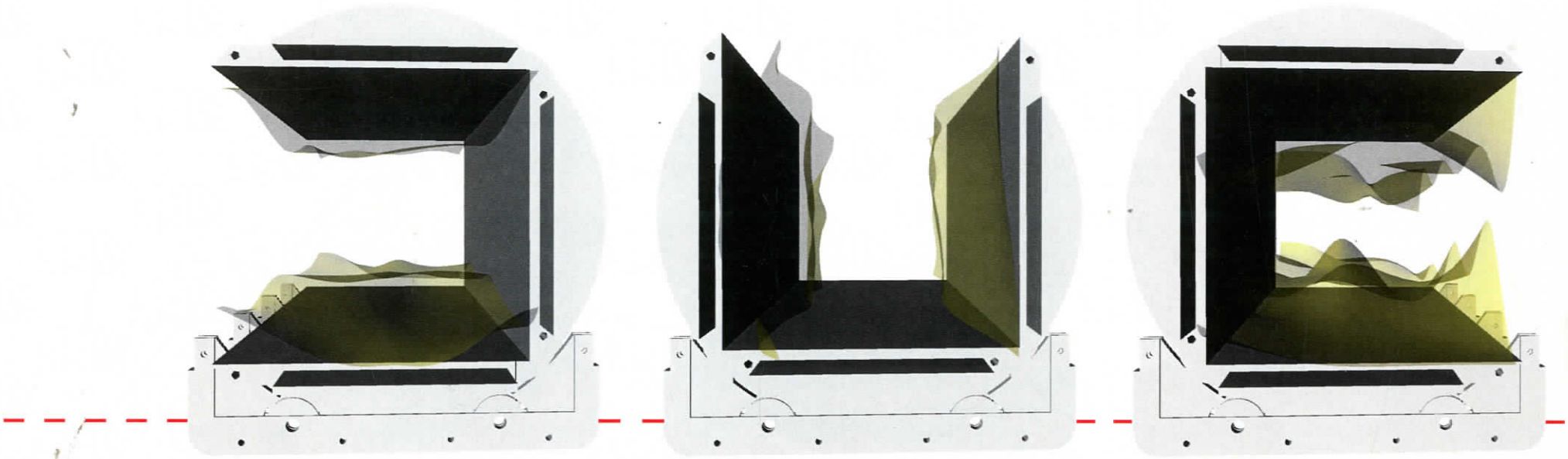
media usage

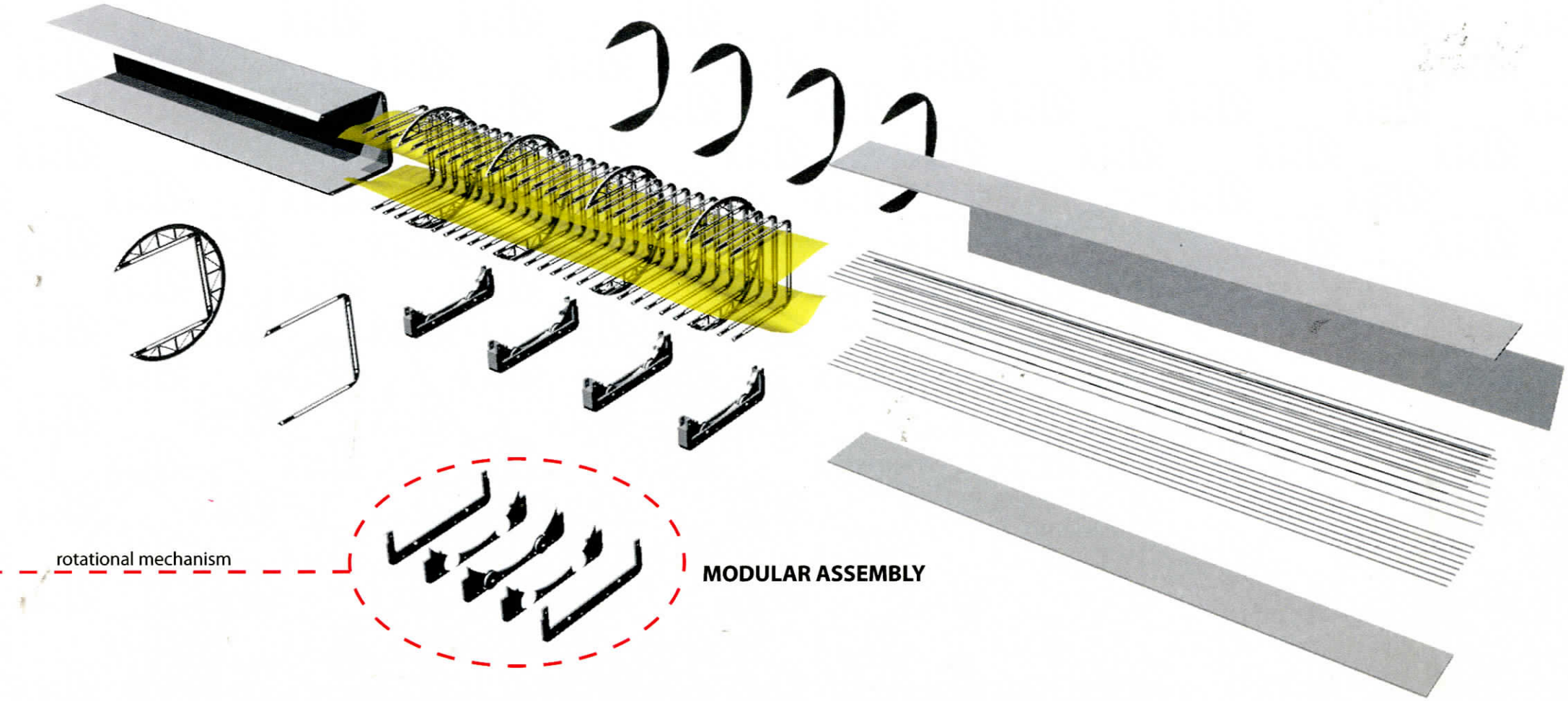
75%

100%

PROTOTYPE: r.1

ROTATIONAL SURFACE ARTICULATION




rotational mechanism
MODULAR ASSEMBLY